

ods employed for speeding up this output are liable to "invite disaster," such methods should be carefully revised.

In the investigations made into the prevalence of communicable diseases by the Division of Sanitation, Bureau of Medicine and Surgery, Navy Department, the conclusion was reached that fatigue was a factor in their spread, and that "the attempt to make a sailor too rapidly is to invite disaster."—Public Health Report.

The Bulletin of the Federation of State Medical Boards states editorially that the attitude of the Federation in the matter of standardizing medical schools has been more clearly defined and the firm stand taken on premedical college requirements, conditions and advanced standing will meet with responsive approval from state boards and medical educators as well.

Whatever may be said against health insurance, one good feature would undoubtedly be the urge toward improved sanitation in working quarters and conditions. The emphasis on disease prevention would be increased, to the mutual advantage of employer and employee.

## Original Articles

### REGULATION OF THE PRACTICE OF MEDICINE IN CALIFORNIA SINCE 1914.\*

By HARRY E. ALDERSON, M. D., San Francisco.  
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The present Medical Practice Act first became effective in August, 1913. It was amended in 1915 and in 1917. A movement is under way to have it further amended. Each amendment is apt to mean a weakening of the law. The object in presenting this paper is to stimulate interest in the direction of preventing further unfavorable changes by the legislature to meet early in 1919. The California State Medical Society is large enough and powerful enough to prevent the passing of freak medical legislation if it will only use its influence.

The regulation of the practice of medicine under existing conditions is almost as difficult as the attempted regulation of religions would be. In fact where religion has been permitted to assume the responsible role of medical practice it has been able to place itself outside the control of the laws regulating practice. Eddyites and other religio-medical masqueraders may practice without licenses and assume full charge of the sick in every way without being subjected to the usual legal restrictions that apply to doctors. So far, however, they have not been authorized to sign death certificates. This is a great source of embarrassment to them, for their deaths are many, and it is said that they are going to try and have laws passed permitting them to do so.

Our Medical Practice Act represents an effort to place medical regulation on a purely educational

basis (the only rational thing to do) and when properly and fully enforced by the Board of Medical Examiners it offers the very best protection of the public. The mentioning of cults and sects by name is carefully avoided. This is a good feature of the law, and as far as possible this paper will carry out this idea. It may be of interest, however, to name the various so-called "schools," cults, and sects, all of which properly come under the heading of *drugless practitioners*. They place themselves in this classification whenever they ask for special legislation providing special exemptions and special forms of licenses. The following list of drugless "schools" while practically complete at this date is constantly growing: Osteopathy, chiroprathy, naprapathy, naturopathy, eclectic chiroprathy, pantherapy, electrotherapy, actinotherapy, neuropathy, mechanotherapy, neurology, spondylotherapy, eclectic osteopathy, suggestive therapy, psychotherapy, and magnetic therapy. It will be observed that therapy constitutes the "raison d'être."

Some of those who are spending much money and effort to obtain special privileges for their followers in the direction of removing legal educational requirements are honest in their belief and they fight and plan with all the zeal of religious fanatics. Most of them, however, when their efforts are analyzed, are proven to be ordinary fakers attempting to gain by questionable means privileges for which they are not in any way fitted. They aspire to all of the rights that are enjoyed by those who, by devoting many years of study in universities and Class A medical schools, have properly fitted themselves for the responsible duties of a physician. They aim to force short cuts to the practice of medicine. They first ask for very special or limited licenses. When they once gain the same, they do not adhere to these limitations, but attempt to do all kinds of medical and surgical work for which they are not trained. In this way they prove the insincerity of all their claims.

The regulation of the practice of medicine is for the protection of the public. Without a proper examining and licensing system, the quack situation (which is bad enough as it is) would soon constitute an extremely serious menace to public welfare. Conditions would result which would bring about most insistent demands by the public for protection. The removal of legal barriers that are designed to prevent (but do not always succeed) the practice of medicine by ignorant and uneducated would-be doctors, would undoubtedly result in an increase in the amount of sickness and disability. This of course would really increase the amount of work for doctors generally. The regular medical profession, however, through the highest motives are constantly trying to increase the protection of the public by increasing educational requirements for those aspiring to practice medicine. Advocates for *lower* educational standards argue with legislators that the medical profession is "trying to cut down competition by making it more difficult to obtain licenses," etc., etc. Some legislators seem only too eager to believe this. When you discuss these matters with your senators and assemblymen it is extremely

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important to make clear to them the fact that the State Medical Society is not trying to limit the number of well educated and completely trained physicians and surgeons. To the contrary we feel that the more of such men there are the better will it be for humanity. We are trying, however, and some of us will keep on trying (no matter how discouraging the outlook) to see that the State Board limits to the smallest possible number those who are not mentally or morally capable of doing their full duty toward the sick public. As soon as the public realizes that they are entitled to more protection in this direction they will not permit any of their representatives in the State legislature to lower educational barriers. They will demand the passage of laws making possible only fully trained doctors,—and then will demand that these laws be enforced. Should health insurance become the law of the land, when the doctor will cost the patient practically nothing, he will promptly demand of the state the best and most profoundly educated doctor, and will be satisfied with nothing else.

Unfortunately this question has often been considered a matter for political consideration rather than a purely educational problem. This applies not alone in California but has held elsewhere. Many states have placed political considerations in the background so that now there are only a few states that are lagging behind in this phase of medical progress. One trouble is that our powerful State Society in the past has felt impelled by a peculiar combination of circumstances to refrain from taking an official part in this fight. On the other hand the leaders of the various cults, sects and special interests (representatives of low grade, commercial colleges) have raised much money, developed aggressive political organizations and by various means impressed those controlling state affairs with their political importance. They have made an impression *all out of proportion to their real importance*. Should our State Society devote one-third this energy the political "powers that be" would very promptly recognize our legitimate claim to consideration. The official organization of the regular medical profession, which includes all of those with complete medical training, the leaders and investigators in scientific medicine and research workers and teachers in the universities, and the only medical body recognized by the United States Government, is most certainly the one to consult in matters pertaining to medicine and surgery. It should only be necessary for our representative to state our position in regard to various state medical matters to the Governor and others in control at Sacramento, to ensure the adopting of only safe and sane medical legislation.

The present Medical Practice Act is a good one. It makes it mandatory on the board to place the entire question on a purely educational basis (the only logical ground on which to stand). All practitioners are divided into two classes—*Physicians* and *Surgeons* and Drugless Practitioners. The law also provides for the examining and licensing of chiropodists and midwives, but that will not be touched upon here.

There is absolutely no mention of cults or sects. This feature constitutes a great improvement over other acts because cults and sects in medicine seem to be designed largely to provide short cuts to the obtaining of licenses through special legislation. There are some cults, sects and schools where the originator probably thought he had discovered a new principle of treatment. Instead of investigating the idea in the careful systematic manner of a scientific research worker and finally presenting the evidence before a learned body capable of passing judgment, the "discoverer" usually founds a new "school," invests in a little equipment, advertises for students and proceeds to make money. It is the financial aspect of the thing that appeals to these great (?) discoverers and this is the root of the evil. The ease of obtaining the necessary training by paying the fees, of course, and a license, and the *quick financial returns* are always emphasized by these people in their advertising literature.

A letter written by a prospective student in December, 1913, to the largest "school" of this type received a very prompt reply in the form of a long letter, a catalogue and an elaborate illustrated souvenir, all of which emphasized the commercial character of the concern. The letter warmly congratulates the prospective student "upon having been awakened to an interest" in this work. Then follows the statement: "If you pursue the course, I am sure you will always look back upon it as the most favorable step in your *business* life!!" The letter goes on to state that "most of the professions have become so overcrowded that there is no longer a fair promise in them," etc., etc., and that there is but one of this cult to each 25,000 persons while there is one M. D. for each 400 persons, and that at the present rate of graduation the demand for representatives of this cult cannot be supplied for twenty years!! After referring to the *money making* opportunities and the chance to help humanity (?) the following illuminating statement appears: "*There is often a disposition on the part of the prospective student to magnify the difficulties*" of acquiring this special kind of training and a license. As a result of steady pressure exerted by the State Board of Medical Examiners and with the co-operation of some really progressive members of the cult sincerely desirous of bettering conditions, this school has improved its facilities greatly. They aim to qualify their graduates for unlimited physician and surgeon licenses. They only require for matriculation, however, a high school diploma, *or its equivalent* and the college year in physics, chemistry and biology required by our law is not exacted of all their students. A report on the institution recently given me by a recognized authority in these matters states that this work was not required of 29 of the 35 admitted to the freshman class, and that as a result of the inspection the school could not at the present time be rated higher than 20 to 25 per cent. as compared with medical colleges. And yet they insist that they give as good training as may be had in a medical college!! The report goes on to state that "There was practically no teaching from the standpoint of clinical departments by members of this school's faculty, since on the entire faculty

only one M. D. appears. Such clinical teaching as the students obtained was by sufferance on the part of teachers of medical schools on the staff of the County Hospital. The clinical material at their own hospital was limited, and of these cases the histories were very poorly kept. The laboratories were very poorly equipped, but above all, the teachers have had no medical training whatever, and it is doubtful whether they have had any reliable training in the subjects which they are endeavoring to teach. Medical educators generally have been unable to understand how graduates of this school can be expected to qualify as physicians and surgeons. "It would seem more logical to allow nurses to practice as physicians and surgeons," since nurses "obtain their training in hospitals, under physicians and study the care of hospital patients by physicians." For these reasons the Federal Government has denied exemption from the draft of students attending this institution.

The greatest efforts made by the "drugless" organizations have been:

First—To encourage all who lack the necessary basic education required to enter a modern medical school, to take up work in their "school."

Second—To build up a strong political organization for the purpose of influencing those in control of legislative and governmental machinery.

Third—To influence legislators to remove barriers that prevent those lacking at least a real high school education and a year in physics, chemistry and biology, and a complete four-year medical training from practicing medicine and surgery.

Fourth—To prevent, if possible, the successful prosecution of those of their number who attempt work (major surgery or drug prescribing, for instance) which the law prohibits their doing.

Fifth—To advertise their "business" and thus induce larger numbers to enter their "diploma mills," spend their money there, and *buy their books*, and perhaps bring them "consultation work."

These various cults have this much in common: they are interested in seeing educational barriers removed. Some of them are sincere in their belief that they are able to do something for humanity, but most of them are "on the same side of the fence" when it comes to influencing legislation. The more enlightened ones of course would like to have standards higher than those lower down the scale, but "*not too high*." Illustrating the attitude of the supposed "higher ups" toward the less fortunate of these various cults the following incident may be of interest. Several years ago at a hearing on medical laws the governor asked of the crowd present, the difference between osteopathy and chiropractic. A representative of the osteopaths promptly said: "Chiropractic represents the first three weeks in osteopathy," whereupon the chiropractic representative objected and asserted that his cult was more advanced than osteopathy. And then the battle was on!

Of these various drugless cults the representatives of the one now in the lead are not satisfied with the very *low* requirements desired by most drugless healers, but they do not desire as high requirements as good medical schools demand. And

they are depending upon the political power of their organization to weaken the law in their interest. For instance, they want to have a high school diploma, or "*its equivalent*," made the maximum preliminary requirement. This phrase "or its equivalent" is a dangerous one, for it can be seen how a lenient board might accept almost anything (for instance, several years' experience selling real estate) as the equivalent of a high school education. I am advised that the organization referred to is also going to try to have the "year in physics, chemistry and biology of college grade" (which after January, 1919, will be necessary) taken out of the law or so modified that this work can be given along with the four years of medical work! Their leaders, who are keen, shrewd men with business and political instincts well developed and sharpened through years of fighting to gain special privileges, assume a desire to improve medical educational conditions. Their actions belie their words as amply proven time and time again. Their record is one of trying to keep standards *lower* and to adhere as closely as possible to minimum requirements of the law instead of really elevating standards. It can be said that the better element amongst their number today represent the type of physician produced by a Class B school twenty years or more ago with the difference that they lack the training in materia medica, pharmacology, therapeutics, bacteriology, pathology, diagnosis and general surgery, etc. Their organization has as a nucleus a largely attended college which could be considered a good drugless college, but which they insist upon being given exactly the recognition granted Class A medical schools. They admit that they do not give a complete medical training and refuse to do so. The board has given them temporary approval. During one year their demands for approval were successfully resisted and they were accepted as a drugless practitioner's college only. All that time they exerted their political power to the utmost, threatened legal action, initiative procedures, etc., but without avail. They have improved their school and now stand approved, however, and in this way our standard at present is set. Naturally every college better than this standard has to be approved! Through a recent amendment to the law which permits them to qualify for an unlimited physician and surgeon license by taking an "oral, clinical OR practical examination" a considerable number have gained these licenses. A very large percentage who took these oral examinations, however, failed to pass. License or no license, many of them prescribe drugs and perform surgical operations and have been doing so for some time. The records of the Industrial Accident Commission, the State Compensation Insurance Fund and various insurance companies show instances of such practice, and also that they bring strong pressure to induce payment of their claims for services, when refused.

Probably the best way to classify practitioners of these various cults and sects would be to say that they are specialists in the narrowest sense of the term. Their exponents base their claims for special consideration by legislators partly on the fact that they have a very special system or method of treatment and that it is not necessary for them

to have the broad education demanded of doctors of medicine. But once they obtain the desired special legislation and then the coveted special licenses, they are not willing to be limited in their work. They are inclined to use drugs and the surgical knife. A recent licentiate who worked for the drugless practitioner feature of the law and whose good recommendations and good record at the board's oral examinations gained for him a drugless practitioner license, has very recently applied to the United States Government for a narcotic license (Harrison Act)!!! They gain their ends by claiming that treatment is the all important part of practise. Every effort should be made to impress upon your senators and assemblymen the fact that therapy is not the only thing. It does not matter what specialty, system, cult, sect, or "school" an applicant may profess to follow provided he has sufficient education. At least one year of physics, chemistry and biology of college grade, in addition to a complete high school education and then a complete four-year medical course, should be required of everyone applying for an unlimited physician and surgeon license. The various groups of drugless practitioners are not satisfied with limited licenses. The law provides for them a drugless practitioner license which permits them to do all that they advertise that they do. That part of the act defining the educational requirements of drugless practitioners and the legal scope of their work is very good. When it comes to asking for a lowering of educational requirements for their followers, these people make a great point of the claim that they are not asking the privilege of practicing medicine and surgery, but wish to do only very limited work which does not require the training necessary for an M. D. degree.

I am informed that various "drugless" cults are combining now to have the legislature do away with some of the best protective features of the law which include the required year in physics, chemistry and biology and also the requirement that all colleges must be *approved by the board* before their graduates can take the state examinations. The examinations are easily passed by any one with a good memory and a fair amount of training. They extend over a period of only three days and are all written. These are no practical tests. A general average of seventy-five per cent. is required, and a candidate may fall below sixty per cent. in two subjects without failing. The test is largely one of a parrot-like ability to repeat what a candidate has crammed into his brain for this special purpose. Written examinations of this sort are not sufficient in themselves to properly gauge a candidate's ability to make diagnoses and meet the responsibilities that come to every physician and surgeon. As far as they go these examinations are good enough and the board has done its best to make them comprehensive. But as the principal and all-embracing test they are far from sufficient. The "drugless" element is strong for these written examinations and bitterly opposed to thorough practical tests. If the examinations are to be the sole test they should be made thorough and should be practical as well as theoretical.

They should extend over a much longer period, say one or two weeks. They should be conducted in the laboratory as well as in hospital wards. This method is carried out successfully by the National Board of Medical Examiners. Our law makes such examinations possible through the appointing of special examining commissioners (not necessarily from the board) to serve from time to time. This has never been taken advantage of, but there is hope that it may be some day. As matters are now, it is vitally important to scrutinize the applicant's credentials thoroughly. If this valuation of the credentials is thorough the written examinations are relatively unimportant.

Periodical thorough inspection of all medical teaching institutions in California should be made after the manner of the Council on Medical Education of the American Medical Association. So well recognized has become the A. M. A. classification of medical schools, that many states have officially adopted the same. Many that have not done so have unofficially depended upon this classification in passing upon candidates' credentials. The California State Board of Medical Examiners during the past four years has made several investigations of California schools. Over this very question much difference of opinion has arisen. It is a very difficult proposition. Out of it all, however, has come some good. Colleges have been forced to improve their physical equipment, faculties and general teaching facilities, but still there is much to be desired in this direction.

In these serious times we should endeavor to co-operate with the Federal Government to the fullest extent possible. We should strive to maintain educational standards high enough to ensure that only properly educated medical men are made ready for the Army and Navy. The Federal Government well recognized its responsibilities in this direction by temporarily exempting from the draft students attending well recognized medical schools (that is, schools approved by over fifty per cent. of the states). Upon completion of their education these students enter the service as medical officers. In this way, only Class A and B schools of the Council on Medical Education Classification of the A. M. A. have become approved. We should at least make the minimum requirements of our Federal Government our minimum requirements. Our duty to the public is particularly pressing now that so many of the best physicians and surgeons have gone into the Army and Navy. Some communities are thus left without competent doctors. It is clearly in the interests of public health that only competent doctors should fill these vacant posts.

The "approval by the board" clause is vitally important. Attempts are going to be made to have it removed from the law. As a means of compelling institutions to do honest work and maintain proper faculties and equipment, it is most important. The State Board of Medical Examiners is the only barrier that stands between the public and the hordes of would-be doctors many of whom with no training at all think that they have been endowed by God or someone else with special ability to cure without diagnosis.

The representatives of the drugless schools have tried hard to have this "approved by the board" clause removed. They admit that a college ought to meet certain requirements in the way of physical equipment, but they insist that this can be set down in black and white, leaving nothing to the discretion of the board. To use a favorite expression of theirs, the law should provide a definite "yardstick" by means of which *alone* one should judge a school. Their idea is to have a few formal easily met requirements set forth in the law, possibly specifying the number of lecture rooms, chairs, tables, desks, blackboards, electric lights, bottles, charts, etc., and by complying with these few simple requirements force the board to approve of their schools. The real worth of a college does not depend upon physical equipment, but rather on things that cannot be "measured" in this way. The character and qualifications of the faculty, quality of the work done, the scientific spirit, the care that is taken to see that the students are properly instructed, and the records of the graduates of an institution, are all things that cannot be measured by a "yardstick." The existence of a large student body does not necessarily mean that a school is a good one. It may mean that the requirements for admission are low and the work offered easy. Commercial institutions of that sort are bound to have as many fee-paying students as their promoters can induce to attend and the minimum amount of profit-consuming equipment. "Diploma mills" pay good money and the "educators" (?) that they attract are not the kind to do honest constructive work. A properly conducted modern medical school costs money to run, as a rule five times as much as taken in fees being spent per capita. The State Board has a certain responsibility in this matter of regulating schools that may be lost sight of. It is the responsibility to the individual student who may enter one of these schools, spend time and money only to find that he is working for a diploma that will be worthless and not recognized outside the state. To my knowledge this has occurred several times. As a means of compelling teaching institutions to give their students an honest return for their time and money, the "approved by the board" clause should be retained in the law.

Reciprocity with other states is much to be desired. In the beginning our law provided for a one-sided reciprocity—i. e., we granted reciprocity licenses to licentiates from other states, but were not permitted to require the return of this privilege. Fortunately it was possible to have the law amended later permitting us to make contracts. The purpose of the original arrangement seems to have been to keep us from being placed in a position where other state boards would demand that we raise our standards before they would accept our licentiates. You can see here the fine hand of parties responsible for this legislation who were vitally interested in keeping down the standard within our state. After four years of "reciprocity" during which time California has extended the courtesy with a free hand to licentiates from most of the states, there are very,

very few that have actually reciprocated with us. However, many states now have signified a willingness to accept our licentiates *provided their college credentials are satisfactory*—i. e., equal to Class A and B schools.

Composite boards would be all right if the members could be made to realize that their first duty is to the public. But the trouble is that on account of the very fact that men are selected from different cults and sects, they are apt to consider that they represent these special interests. This feeling that members are appointed to satisfy the different interests is responsible for lack of harmony.

As a matter of fact, the board is supposed to represent the public whom it is sworn to protect. The members ought to be appointed to administer the law without regard for cults, sects and interests. There is nothing in the law to prevent the Governor from appointing a board made up entirely of members with a complete medical education. Such men surely would be the ones best qualified to enforce the law in the interest of the sick public. There is a provision in the law which permits the board to appoint special examining commissioners. To satisfy the various cults and sects the board, from time to time, could appoint specialists representing these cults and sects to give part of the examination. Surely no one would object to such special examinations, provided the candidate were examined by experts in all the fundamentals of medicine. Our law provides the means of handling this troublesome question in a manner that ought to be satisfactory to all honestly concerned in seeing the giving of licenses based on merit only.

The prosecution of violators of the law is a large subject and will be left for a future paper. One of the troublesome problems confronting the board has been that of stopping the practice of surgery and the use of drugs by those whose training and limited licenses do not warrant such practice. There are many who are openly and defiantly doing this in violation of the law. Why they are able to do this will be made a subject for special discussion in the near future.

The outlook for the future is fairly good. With a growing realization of the importance of keeping the regulation of the practice of medicine on a purely educational basis it will be increasingly more difficult to weaken the force of the law. With realization of the fact that the members of the board are appointed *solely* to enforce the law for the better protection of the public, will come the much desired elevation of educational requirements. Those trying to induce legislators to lessen this protection grossly insult the great majority who are sincerely desirous of seeing that the public is provided only with educated and capable physicians.

The legislature will meet in a few months and we may expect the usual assaults on the Medical Practice Act. Each session has seen less and less of a desire on the part of legislators to change the law. It is hoped that this time no changes will be permitted. Great preparations are being made by the drugless bodies, the amalgamated quacks

and all interested in doing away with barriers that keep the uneducated, half educated, mentally and morally unfit from practicing on the public. Funds are being raised and material is being prepared for the great biennial drive, the great winter offensive. We may expect much mud-throwing and the usual efforts to cloud issues so as to hide the real motives of those wanting to amend the law. A favorite line of attack is to go after an imaginary "medical trust" and try and make it appear that it is striving to cut down competition by keeping worthy candidates from obtaining licenses! Another favorite one is the "poor boy" argument! Why not let the poor boy who has no basic education, take a short course in one of these schools and gain the wonderful knowledge and skill made possible by their teachers in a few months? Why deny the poor man who does not want "high toned high brow doctors" the great privilege of having these "short cut" geniuses? If some of these people had their way we should have night schools and correspondence schools of medicine in large numbers in our midst, for they pay the promoters well. From the beginning of a session of the legislature to the end, these people have well paid, active, aggressive representatives on the job day and night. They begin their work long before legislature convenes. In fact some of them keep up their propaganda constantly. Although these different cults and sects have relatively few followers when compared with the medical profession, they have very active aggressive organizations that make an impression all out of proportion to their legitimate importance. They keep constantly working on the Governor, his advisors and the legislature. On the other hand, our great State Medical Society remains more or less passive until the eleventh hour, and then, unless something very vital is at stake, it does little when it might do a very great deal. *Legislators as a rule do not want to pass bad laws.* But when they feel most of the pressure coming from one direction for or against a bill it is perfectly natural for them to be influenced. The average senator and assemblyman wants to be guided by the "voice of the people" and he is very much interested in telegrams, letters, petitions and delegations that come in the interest of any bill. The representatives of various cults desiring special legislation make full use of this fact and through their organizations see that on a given signal, telegrams, letters, etc., pour into Sacramento from every part of the State. It is remarkable how very numerous are these messages sent to the Governor's office for or against medical bills awaiting his endorsement or veto. The California State Medical Society with very little effort can make its great influence felt in this way on behalf of sane medical legislation. Not only would its assistance in this manner be welcomed by those in authority in Sacramento, but the state board itself would respond. As the organization of the greatest number of licentiates in the state, with its members amongst the leaders in every community including also the teachers in the universities and colleges and the leaders in scientific medicine, our advice properly presented is most certain to be heeded.

## ARTHROPLASTY OF THE HIP JOINT, MURPHY METHOD. REPORT OF FOUR CASES.\*

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I believe that the cases I will report will justify your attention, in that I will endeavor to show that the operation of arthroplasty of the hip joint, as taught by the lamented John B. Murphy, is a highly practical and justifiable operation, even in the hands of those who are doing limited surgery, and are less adept than our specialists. The results obtained are so satisfactory that it should be urged in all cases at the proper time to restore the patient to a normal condition in life, and done before secondary deformities, as tilting of the pelvis and spinal curvature, intervene. We freely admit that such a condition as an ankylosed joint should almost never occur; that prompt attention to the tuberculous, and immediate aspiration, injection and extension, of the septic joint, would prevent such a pathological state and preserve the joint in its normal state. But so long as it is human to err, such joints will present themselves for our correction.

I will give you a very brief history of four cases upon which I have operated.

Case 1. Mrs. T., age 26, housewife. In 1906 had a miscarriage at two months and seemed to do well, but discovered about two weeks later all was not well and was curried at her home. Was up in one week. Three or four days later was taken with high fever and darting pains in right hip, which soon were continuous. This continued for about 10 days, gradually getting worse, when she was taken to the hospital and an opening made just below the right inguinal region, which discharged considerable pus.

At irregular intervals from this time on new openings were made with pus discharge and with necrosed bone, until finally in 1909 she left the hospital with right hip ankylosed at an angle of 25 degrees and right knee flexed at 25 degrees and partially stiff.

In this condition she came into my hands and was operated upon on March 27, 1914. She had an uneventful convalescence. The pictures and x-ray plate show the result. There is some shortening due to loss of bone about the pelvis and head of the femur but the joint has as free motion as the left. The knee joint has, through use, returned to normal. It has given her a very serviceable leg.

Case 2. Mr. H., age 26, teacher. Gives an uncertain history of tuberculosis of the hip joint finally resulting in complete ankylosis at the age of 12. Since that time has walked with an extension on his shoe. Gradually curvature of the spine developed. This was followed by trouble in the 12th dorsal vertebra resulting in a marked kyphosis at the dorso-lumbar joint. Walking and sitting put a strain upon this, rendering it painful to such a degree that relief was sought. It seemed to me that a joint to relieve the right hip, would remedy the trouble, and so the operation was urged. It happened that Dr. John B. Murphy was visiting in Pasadena at the time. Mr. H. learned of this and wrote Dr. Murphy, stating his condition, and asking advice. Dr. Murphy examined him, studied the x-ray picture, told him, "Your chances of success are about 80 to 20," and advised the operation. This is another instance showing where

\* Read before the Southern California Medical Society at Redlands, May 3, 1917.